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FCC Mail Room

April 28, 2017

Ms. Marlene H. Dortch
Office of the Secretary
Federal Communications Commission
445 12th St. SW
Washington DC 20554

DOCKET FILE COPY ORIGINAL

Subject: OCBO: CB Docket No. BO 16-251; DA 16-792: Possible Revision or Elimination of Rules

Dear Ms. Dortch:

The Air Line Pilots Association (ALPA), representing the safety interests of over 55,000 professional airline pilots flying for 32 airlines in the United States and Canada, has reviewed the FCC regulations identified in letter DA 16-792 dated 28 December 2016, and has provided the enclosed detailed comments.

ALPA's primary concern pertaining to FCC regulations is to ensure that safety-of-life aeronautical radio communication and radio navigation services remain protected, and that other uses of radio spectrum do not cause interference with these critical services. To that end, our comments primarily advocate for retaining or strengthening the technical performance standards of radio equipment, and to ensure that other services do not encroach upon the spectrum reserved for aeronautical use. Of particular concern, more recently is ensuring interference-free operation of the Global Position System (GPS) and similar Global Navigation Satellite Systems (GNSS) as these services are critical to safe navigation and landing during all weather conditions. ALPA believes that the public interest is best served by strong regulation in these areas.

ALPA appreciates your consideration of our concerns, both with respect to the specific regulation review provided herein, as well as more generally in future matters under the Commission's purview.

If you have any questions, please don't hesitate to contact me at 703.689.4189.

Sincerely,

Edward Hahn
Staff Engineer

Enclosure

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Detailed Comments on FCC Regulations under Review in DA 16-792

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The following comments have been provided by ALPA on the specific parts of 47 Code of Federal Regulations (CFR) that have been identified in DA 16-792. If a regulation identified in DA 16-792 is not mentioned in these comments, ALPA expresses no interest in that aspect of regulating those services.

47 CFR Part 2: Frequency Allocations and Radio Treaty Matters

- **2.202** defines how bandwidths of signals are measured, calculated, and expressed, and forms a technical foundation for how FCC regulates industry.
 - **ALPA recommends retaining this rule unchanged.**
- **2.303** defines radiotelephony station call signs as used in aviation.
 - **ALPA recommends retaining this rule unchanged, so as to maintain aviation radiotelephony standards.**
- **2.1203** and **2.1207** set conditions for importation and inspection of RF devices to prevent harmful interference.
 - **ALPA recommends retaining this rule at a minimum, and further recommends strengthening the rule, to eliminate the one-year time limit after entry, and/or to potentially require inspection prior to importation of devices.**

47 CFR Part 15: Radio Frequency Devices

- **Subpart F Ultra-Wideband Operation** (all identified parts).
 - **ALPA recommends retaining these rules unchanged, so as to ensure no interference on aviation spectrum bands.**

47 CFR Part 24: Personal Communications Services

- **24.133a** sets power limits for Narrowband PCS.
 - **ALPA recommends retaining these rules unchanged, so as to ensure no interference on aviation spectrum bands.**

47 CFR Part 25: Satellite Communications

- **25.103** provides definitions for all of Part 25.
 - **ALPA recommends retaining this rule unchanged, and that if any changes to these definitions are proposed, that they be made by separate rulemaking.**

- **25.115c2** governs the application process for earth station authorizations in the 3700-4200 MHz and 5925-6425 MHz bands. Certain radio-navigation devices on aircraft (e.g., radar altimeters and avionics wireless intra-communications systems) are adjacent to these bands.
 - **ALPA recommends retaining this rule unchanged to ensure operating parameters do not interfere with aviation devices.**
- **25.117** and **25.118** govern modifications of station licenses.
 - **ALPA recommends retaining these rules unchanged to ensure that station operating parameters do not change without scrutiny.**
- **25.120b** governs special temporary authorizations.
 - **ALPA recommends retaining this rule unchanged to ensure that these authorizations are truly used in exceptional circumstances, so that the opportunity for inadvertent interference on other services is minimized.**
- **25.129** governs equipment authorization for importation, sale or lease of portable earth-station transceivers.
 - **ALPA recommends retaining these rules unchanged, so as to ensure earth stations do not cause interference with other equipment.**
- **25.130a** and **25.132a** govern application and antenna requirements for transmitting earth stations.
 - **ALPA recommends retaining these rules unchanged, so as to ensure earth stations do not cause interference with other equipment.**
- **25.287** governs operational of mobile stations in the 1.5-1.6 GHz, 1.6-2.4GHz, and 2 GHz Mobile Satellite Service Bands, providing for message priority for maritime distress. In some aviation, Oceanic Search and Rescue (SAR) scenarios there may be use of maritime distress service.
 - **ALPA recommends retaining these rules unchanged, to ensure no degradation of maritime distress and safety services (as it may relate to search-and-rescue capabilities used for aviation).**
- **25.138** governs the licensing requirements for GSO FSS earth stations in the conventional Ka band, including EIRP limits.
 - **ALPA recommends retaining these rules unchanged, so as to ensure earth stations do not cause interference with other equipment.**
- **25.140a** governs licensing requirements for GSO space stations operations, including EIRP limits.
 - **ALPA recommends retaining these rules unchanged, so as to ensure space stations do not cause interference with other equipment.**

- **25.142a1** governs Licensing provisions for NVNG Mobile Satellite Services, including technical details on the systems be provided for inspection by FCC.
 - **ALPA recommends retaining these rules unchanged, so as to ensure space stations do not cause interference with other equipment.**
- **25.146** governs licensing and operating rules for Non-Geosynchronous Satellite Orbit stations in the 10.7-14.5 GHz bands, including EPFD limits.
 - **ALPA recommends retaining these rules unchanged, so as to ensure space stations do not cause interference with other equipment.**
- **25.148** governs licensing provisions for Direct Broadcast Satellite services, including both service and technical requirements.
 - **ALPA recommends retaining these rules unchanged, so as to ensure space stations do not cause interference with other equipment.**
- **25.149** governs the Ancillary Terrestrial Components (ATCs) for Mobile Satellite Services in the 1.5/1.6 GHz and 1.6/2.4GHz bands.
 - **ALPA recommends that this rule is retained, especially paragraph (d), so to ensure ATCs do not cause interference to Global Positioning System (GPS) or Global Navigation Satellite Systems (GNSS), which are adjacent to this band.**
- **25.154a3, c, and d** governs the process for filing opposition to a license applications.
 - **ALPA recommends these sections be retained or strengthened, to ensure that there is a means for the public to weigh in on application harmful to the public interest.**
- **25.202a** governs the frequency assignments for the various satellite services.
 - **ALPA recommends retaining this rule unchanged, and that if any changes to these assignments are proposed, that they be made by separate rulemaking.**
- **25.208c, d, l, m, n, o, p-t and 25.209h1** govern power and antenna requirements.
 - **ALPA recommends retaining these rules unchanged, so as to ensure non- interference with other equipment.**
- **25.216** governs limitations from mobile earth stations.
 - **ALPA recommends retaining these rules unchanged, so as to ensure non-interference with other equipment.**
- **25.253 and 25.254** govern special requirements for ATCs operating in the frequency bands in the vicinity of GPS/GNSS.
 - **ALPA recommends that these rules are retained, so to ensure ATCs do not cause interference to GPS or GNSS which are adjacent to this band.**

- **25.255** governs procedures for resolving harmful interference related to ATC operations in the frequency bands in the vicinity of GPS/GNSS.
 - **ALPA recommends that this rule is retained or strengthened (e.g., by setting response time limits), so to ensure and interference to safety critical GPS/GNSS is resolved as quickly as possible.**
- **25.285** governs use of MSS and ATC transmitters/transceivers aboard civil aircraft. It prohibits use of equipment that transmit near GPS/GNSS and VHF bands without approval from the FAA, or is used by the pilot or with the pilot's consent.
 - **ALPA recommends retaining this rule to ensure non-interference with other equipment on aircraft.**

47 CFR Part 27: Miscellaneous Wireless Communications Services

- **27.60d, h; 27.53g, l; and 27.55a4** govern power and emissions from these services.
 - **ALPA recommends retaining these rules unchanged, so as to ensure non-interference with other equipment.**

47 CFR Part 73: Radio Broadcast Services

- **73.152b** governs AM radio directional antennas and interference from other AM broadcast stations. It should be noted that aviation Non-Directional Beacons are also in this frequency band.
 - **ALPA recommends retaining these rules unchanged, so as to ensure non- interference with other services.**

47 CFR Part 76: Multichannel Video and Cable TV Service

- **76.610 and 76.616** govern technical requirements (leakage limits) and operations around certain aeronautical and marine frequencies.
 - **ALPA recommends these be retained to ensure non-interference with safety-of-flight and Search and Rescue (SAR) aeronautical spectrum**
- **76.1803 and 76.1804** govern requirements for signal leakage monitoring from MVPD systems including leakage within the aeronautical spectrum.
 - **ALPA recommends these be retained to ensure non-interference with safety-of-flight and Search and Rescue (SAR) aeronautical spectrum.**

47 CFR Part 78: Cable TV Relay Service

- **78.36, 78.106, and 78.109** govern frequency coordination, interference to Geostationary satellites, and major or minor modifications to stations.
 - **ALPA recommends retaining these rules, so as to ensure non-interference with other services.**

47 CFR Part 80: Maritime Services

- **All Subparts identified in DA 16-792 (D, E, F, J, R, and W).** These regulations govern shipboard radio equipment including those which may be used for Search and Rescue operations.
 - **ALPA recommends that these regulations be retained to ensure SAR services are protected.**

47 CFR Part 87: Aviation Services

- **All Subparts identified in DA 16-792 (D, F, G, and I).** These regulations govern the aeronautical spectrum and equipment.
 - **ALPA recommends that these regulations be retained to ensure proper use and protection of aeronautical spectrum.**

47 CFR Part 90: Private Land Mobile Radio Services

- **90.20** governs who can be in the Public Safety Radio Pool.
 - **ALPA recommends that this regulation be retained to ensure SAR and Airport Rescue and Fire Fighting services are protected and effective.**
- **90.203j, I and 90.209b6** govern certification for transmitters in the 150-174 MHz and 406-512MHz band. The upper band is adjacent to the 406MHz SAR frequency.
 - **ALPA recommends retaining this regulation to ensure SAR and aeronautical spectrum is protected from interference.**
- **90.548** governs radio interoperability for 700MHz bands which may be used for Public Safety.
 - **ALPA recommends retaining these rules, so as to ensure non-interference with other services.**
- **90.553** governs encryption commonality, to allow first responders to roam into other jurisdictions and still work.
 - **ALPA recommends that this regulation be retained to ensure SAR and Airport Rescue and Fire Fighting services are effective.**

47 CFR Part 95: Personal Radio Services

- **Subpart E** sections identified in DA 16-792 state that DSRCS-OBUs (e.g. used in Intelligent Highway Systems) are governed by Subpart L of Part 95.
 - **ALPA recommends retaining these rules, so as to ensure non-interference with other services.**

- **Subpart K** governs Personal Locator Beacons on the 406.0-406.1 MHz band. This band is shared by Emergency Locator Transmitters on aircraft for SAR purposes.
 - **ALPA recommends retaining this regulation to ensure SAR activities on 406 MHz is interoperable with Personal Locator Beacons.**
- **Subpart L** governs technical requirements for DSRCS-OBUs.
 - **ALPA recommends retaining these rules, so as to ensure non- interference with other services.**

47 CFR Part 101: Fixed Microwave Services

- **Subpart C** governs technical standards, including interference protection criteria, frequency tolerance, emissions and transmit power limitations, and frequency assignments.
 - **ALPA recommends retaining these rules, so as to ensure non-interference with other services.**